

Vessel Traffic Service

Berwick Bay




User Manual

10th Edition 2001



www.uscg.mil




Welcome to VTS Berwick Bay and thank you for taking the time to read our User Manual. It contains information that will help you use our service to your best advantage. It also satisfies the federal regulatory requirement of the Code of Federal Regulations, 33 CFR §161.1, that VTS Users carry the rules.

Our goal at VTS Berwick Bay is to help you transit the area safely, and with minimal delay. Comments and suggestions are always welcome, and we encourage you to visit our Vessel Traffic Center located at 800 David Drive in Morgan City, LA. We look forward to working with you.

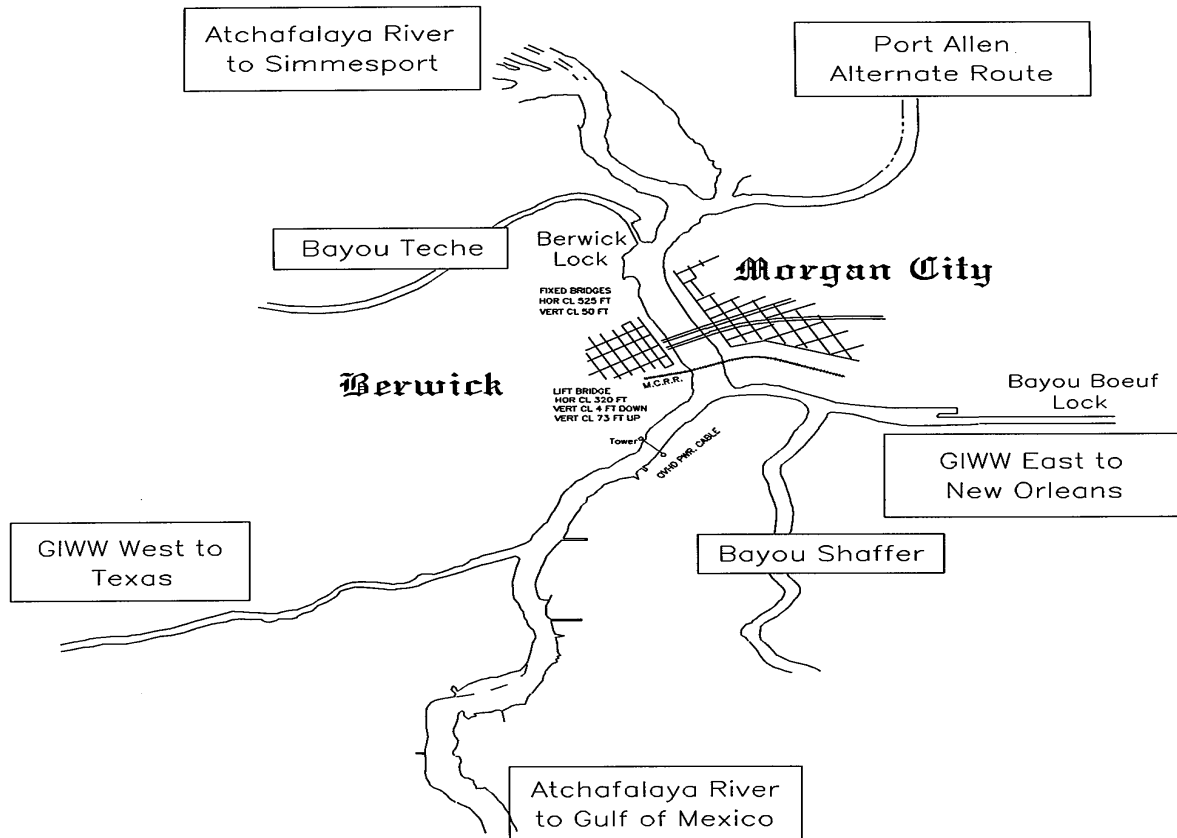
Please call us anytime at (985) 380-5370 if we can be of assistance.

Copies of this manual are available free of charge from VTS Berwick Bay.

Caution: Information provided by VTS Berwick Bay is, to a large extent, based upon reports from participating vessels and can be no more accurate than the information received. The Coast Guard may not be aware of all hazardous circumstances within the VTS Area, and unreported hazards may confront the mariner at any time.



Introduction



VIS Berwick Bay commenced operations in 1975, in response to concern for maritime safety regarding the high number of allisions with the railroad bridge. Our primary purpose is to organize vessel traffic in the VIS Area so as to reduce the risk of maritime accidents. In order to accomplish that, participating mariners provide reports to the Vessel Traffic Center, which in turn provides advisories to participating vessels. It is this exchange of information that makes the system work.

In addition to working directly with mariners, we also maintain close liaisons with the Burlington Northern Santa Fe railroad and the U.S. Army Corps of Engineers. The Morgan City Railroad Bridge, and the two locks in the VIS Area, the Bayou Boeuf and Berwick Lock are critical components of vessel traffic management in Berwick Bay.

Berwick Bay is a busy port, and the level of radio and vessel traffic can be great. At certain times it may be necessary to temporarily restrict vessel movements in the port in order to prevent the VIS from overloading.

Who Participates

You must monitor the VTS frequency, channel 11 VHF-FM at all times within the VTS Area *and* participate fully in the Vessel Movement Reporting System (VMRS) if you are a

- Power Driven Vessels at least 40 meters in length (130 feet)
- Towing vessels at least 8 meters in length (26 feet) engaged in towing
- Vessels certified to carry 50 or more passengers for hire when engaged in trade.

These vessels are not required to monitor Channel 16 VHF-FM in the VTS Area. Instead they must monitor the VTS frequency and channel 13 VHF-FM for Bridge to Bridge communications.

You must monitor the VTS radio frequency at all times within the VTS Area if you are

- Power Driven Vessels at least 20 meters in length (65 feet)
- Vessels of at least 100 gross tons carrying one or more passengers
- Dredges or floating plants operating so as to affect other vessels navigating

These vessels are not required to monitor Channel 16 VHF-FM in the VTS Area. Instead they must monitor the VTS frequency and channel 13 VHF-FM for Bridge to Bridge communications.

Finally, any vessel intending to enter the VTS Special Area, which are those waters within 1000 yards of the Morgan City Railroad Bridge, must contact the VTS on the appropriate frequency before entering that area.

By maintaining a continuous listening watch on the VTS frequency all mariners will enhance their ability to safely navigate.

Who Needs This Manual

All VTS Users are required to carry the VTS rules. The rules are contained in the User Manual, the applicable Coast Pilot, and the Code of Federal Regulations.

The VTS Area

The VTS Area encompasses the navigable waters between 29° 37' N and 29° 45' N, bound by 91° 18' W and 91° 10' W, which includes these segments of navigable waterways.

- The Atchafalaya River from Mile 113 to Mile 123.
- The Intracoastal Waterway from Mile 93 West of Harvey Lock(WHL) to Mile 102 WHL
- The Morgan City/Port Allen Route from Mile 0 to Mile 5.
- From the Berwick Lock to one statute mile northwest along Bayou Teche.
- From the Bayou Shaffer Junction, ICW Mile 94.5WHL to one statute mile south.

The VTS Special Area (SA)

The Vessel Traffic Center coordinates the raising and lowering of the Morgan City Railroad Lift Bridge, and those waters within 1000 yards of the bridge are designated a **Special Area**. This area includes the triple-bridge complex in Berwick Bay, and the blind intersection at 20 Grand Point, where the Intracoastal Waterway meets the Atchafalaya River at Morgan City.

All Vessels must

- receive clearance from the VTC prior to entering this **Special Area**
- receive clearance from the VTC prior to meeting, crossing or overtaking another vessel in this **Special Area**

Telephone may also be used to call the Vessel Traffic Center to coordinate a bridge transit.

The Regulated Navigation Area (RNA)

The Atchafalaya River, from 4000 yards south of the Morgan City Railroad Bridge, to 2000 yards north of the US 90 Highway Bridge is designated as a Regulated Navigation Area. Within this area regulations pertaining to towing vessel horsepower are in effect during periods of High Water. High Water is specifically discussed later in this manual.

Working With Berwick Traffic

The radio call for VTS Berwick Bay is *BERWICK TRAFFIC*. Channel 11 VHF-FM, 156.55 MHz is the VTS working frequency. The VTS can also be hailed on Channel 16 VHF-FM. Vessels unable to call on the radio may contact traffic via telephone at (985) 380-5370.

Checking In - Sailing Plan

The initial report consists of:

- Type & Vessel Name
- Location
- Destination

Towing vessels must also provide:

- Length & Width of Tow (barges only)
- Status of Barges (loaded or empty)
- Cargoes
- Horsepower

Examples:

“Berwick Traffic this is the towing vessel TOWBOAT at the 102, eastbound for the Bayou Boeuf Lock. My tow is 595 by 70. I have 2 loads of steel, 2 loads of salt, and 2 empties, sixteen hundred horsepower.”

“Berwick Traffic this is the supply vessel CARRY ALL checking in at Ambar North, southbound for sea.”

“Berwick Traffic this is the light boat MR TUG at the Berwick Lock, southbound for Basin Fleet.”

Checking Out - Final Report

When mooring or departing the VTS Area, provide:

- Name
- Location

Example:

“Berwick Traffic, this is MR TUG checking out at the 5 mile board.”

Where Do I Check In / Check Out

Within the VTS Area, vessels initially check in when getting underway, and they check out when moored or secured. Upon entering or departing the VTS Area vessels shall check in or out as appropriate, at the following points:

<i>Boundary Point</i>	<i>Local Reference</i>
Mile 113 Atchafalaya River	Stouts Point Light “1”
Mile 5 Morgan City/Port Allen Route	Buoy “10”
Mile 2 Morgan City/Port Allen Route	Berwick Lock (if transiting lock)
Mile 93 WHL	Bayou Boeuf Lock
Bayou Shaffer	Bayou Shaffer Highlines
Mile 123 Atchafalaya River	Light “36”
Mile 102 Intracoastal Waterway	Light “3”

Position Reports

In addition to checking in and out, vessels must make position reports as they transit the VTS area by providing

- Name
- Reporting Point
- Any change in status since last report

Example:

“Berwick Traffic, this is MR TUG at 20 Grand.”

Where Do I Make Position Reports

Vessels shall make position reports at the following points:

<i>Reporting Point</i>	<i>Local Reference</i>
Mile 115 Atchafalaya River	Stouts Pass
Mile 3 Morgan City/Port Allen Route	Swiftships Shipyard
Mile 1.5 Morgan City/Port Allen Route	Conrads Point (southbound only)
Mile 0.3 Morgan City/Port Allen Route	Morgan City Railroad Bridge
Mile 95.5 (WHL) Intracoastal Waterway	20 Grand Point
Mile 96.5 (WHL) Intracoastal Waterway	Atchafalaya River Highlines (northbound only)
Mile 98.5 (WHL) Intracoastal Waterway	The 99 (Little Wax Bayou Junction)
Mile 120 Atchafalaya River	Light “44”
Mile 94.5 (WHL) Intracoastal Waterway	Bayou Shaffer Junction

Deviation Report - Change In Sailing Plan

If a vessel's status or intended route change, provide:

- Name
- Location
- New Information

Example:

“Berwick Traffic this is MR TUG at 20 Grand. I need to turn around and go south to Berry Brothers.”

Tow Size Limitations

At all river stages, tows transiting the Morgan City Railroad Bridge are limited in size.

For a tandem tow the maximum length of just the tow excluding the tug is 1180 feet whenever the Morgan City river gauge reads 3.0 feet or higher.

For doublewide tows the maximum length of just the tow, excluding the tug, is 600 feet.

The maximum width of a tow is 72 feet. A deviation for width may be granted on a case by case basis.

The variation in the drafts and beams of barges in a multi-barge tow should be minimized in order to avoid unnecessary strain on coupling wires.

Note: The regulations contained in 33 Code of Federal Regulations 162.75 contain procedures for issuing Coast Guard permits for oversized tow on waterways tributary to the Gulf of Mexico. Vessels with oversize tow permits issued by the Coast Guard must still comply with the above size restrictions if transiting the VTS Area regardless of the permit!

High Water

Typically high water is seasonal from January through June, but any time the Atchafalaya River stage at Morgan City is 3.0 feet or higher, it is classified as high water for vessel traffic management purposes. The Captain of the Port will notify mariners when high water begins and ends via Notice to Mariners per the following table:

<i>River Stage</i>	<i>Actions Taken</i>
2.5' Rising	Issue preliminary High Water notice reminding mariners of the provisions of the Regulated Navigation Area (RNA)
3.0' Rising	High Water. Provisions of RNA in force for south bound tows transiting the bridge complex.
3.5'	Provisions of RNA in force for all tows transiting the bridge complex.
5.0'	VTS Measures in place limiting tows to 600 feet in length when south bound through the bridge complex, or turning west at Mile 98.5 WHL.
3.5' Falling	Provisions of RNA normally suspended for northbound tows transiting the bridge complex.
3.0' Falling	Low Water. Provisions of RNA suspended for all tows transiting the bridge complex.

During High Water, two vertically arranged red balls by day, and two vertically arranged flashing white lights by night are displayed on the Morgan City Railroad Bridge.

Towing Vessel Horsepower

During high water, the Coast Guard Captain of the Port requires that towing vessels meet the horsepower parameters set forth in the CFR for tandem tows. Doublewide tows are also subject to horsepower parameters as set forth by the Captain of the Port. *These horsepower restrictions only apply to tows with less than 3000 horsepower intending to transit the bridge complex at Morgan City.*

The table on the next page is provided for your planning and use.

Assist Boats

Tows that do not have the required horsepower *may* be allowed to use assist boats to help them transit and “make up” the required horsepower. An assist boat may be “wired in” (i.e., faced up and connected to the tow), or allowed to shadow depending upon the river stage and the tow configuration. Whenever a shadow boat is allowed, it must be immediately available to render assistance and should hold close aboard in position to respond.

Tows that are doublewide shall have at least 75% of the required horsepower ‘wired in’, at river stages 3.0 feet and higher. Once that condition is met, a shadow boat can be used to make up the remaining 25%.

Tandem tows shall have at least 50% of the required horsepower ‘wired in’, at river stages 3.0 feet to 4.9 feet. For river stages 5.0 feet and above, tandem tows shall have at least 75% of the required horsepower ‘wired in’. Shadow boats may then be used as already described above.

Box Barge In The Lead

During high water, whenever a *loaded* box barge is in the lead of a tow, that tow cannot be longer than 400 feet.

RNA High Water Horse Power Table

Tandem Tows (Max Of)		
	Day	Night
Up	400 or 3(LoT – 300)	600 or 3(LoT – 200)
Down	600 or 3(LoT – 200)	600 or 3(LoT)
COPH	600 or 3(LoT)	
≤ 200 Feet (Not COPH)	Minimum of 400 or 3(LoT)	

Double Wide Tows (Min Of)		
	Day	Night
Up	1800 or 3(LoT)	2400 or 3(LoT)
Down	2400 or 3(LoT)	3000 or 3(LoT)
Haz	3000 or 3(LoT)	

LoT= Tandem Length of All Barges ('Strung Out')

Haz= Hazardous cargo

COPH= Cargo of Particular Hazard

A 5% variance is allowed.

Examples:

1) For a tandem tow not carrying CPH, where the tow is 780 feet long by 35 feet wide, transiting the bridges up bound at night, per the table, the necessary horsepower is the *maximum* of 600 or $3(\text{LoT} - 200)$. The tandem length of the tow is 780 feet so we have,

$$\begin{aligned} & 3(780 - 200) \text{ or } 3 \times (780 - 200) \\ & = 3 (580) \\ & = 1740 \end{aligned}$$

Since 1740 is greater than 600, 1740 is the calculated horsepower. The required horsepower is 5% less than the calculated. So,

$$\begin{aligned} \text{Required HP} &= .95(1740) \\ &= 1653 \end{aligned}$$

To bring this tow through the bridge complex in this example, the tug needs at least 1653hp.

2) For a double-wide tow not carrying any hazardous cargo, where the tow is 595 feet long by 70 feet wide, transiting the bridges up bound at night, per the table, the necessary horsepower is the *minimum* of 2400 or $3(\text{LoT})$. Because this tow is doublewide, we first need to know the tandem length which is $2(595)$, or 1190 feet. Now we have,

$$\begin{aligned} & 3 (1190) \\ & = 3 \times 1190 \\ & = 3570 \end{aligned}$$

Since 2400 is less than 3570, 2400 is the calculated horsepower. The required horsepower is 5% less than the calculated. So

$$\begin{aligned} \text{Required HP} &= .95 (2400) \\ &= 2280 \end{aligned}$$

To bring this tow through the bridge complex in this example, the tug needs at least 2280hp.

Aids to Navigation

Mariners should use all available means to navigate. Navigation aids are maintained in the VTS Area. Consult charts, the Light List and Coast Pilot for specific information.

Lighted Danger Range

Watch the Berwick Bay Bridge Approach Danger Range, which marks the western boundary of the suggested downbound course for approaching the bridges.

DO NOT STEER ON THIS DANGER RANGE!

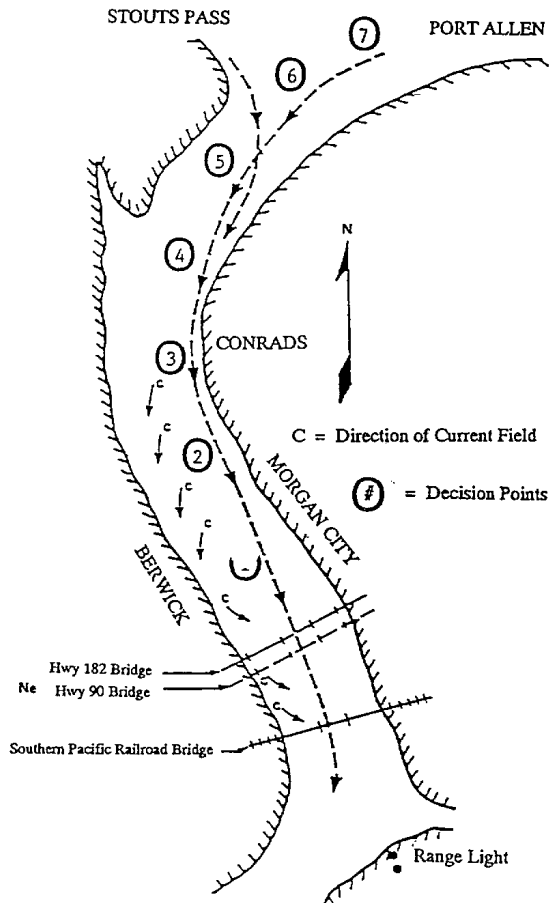
If you are descending to the west (or right) of this range, you are standing into danger and must take early corrective action to avoid being set down onto the bridge abutments.

Lighted Navigation Range

A lighted range also marks the sailing line through the Morgan City Railroad Bridge only.

Illustrations

CUSTOMARY TRACK FOR THE NAVIGATION AND OPERATION OF A TOW THROUGH BERWICK BAY BRIDGES¹

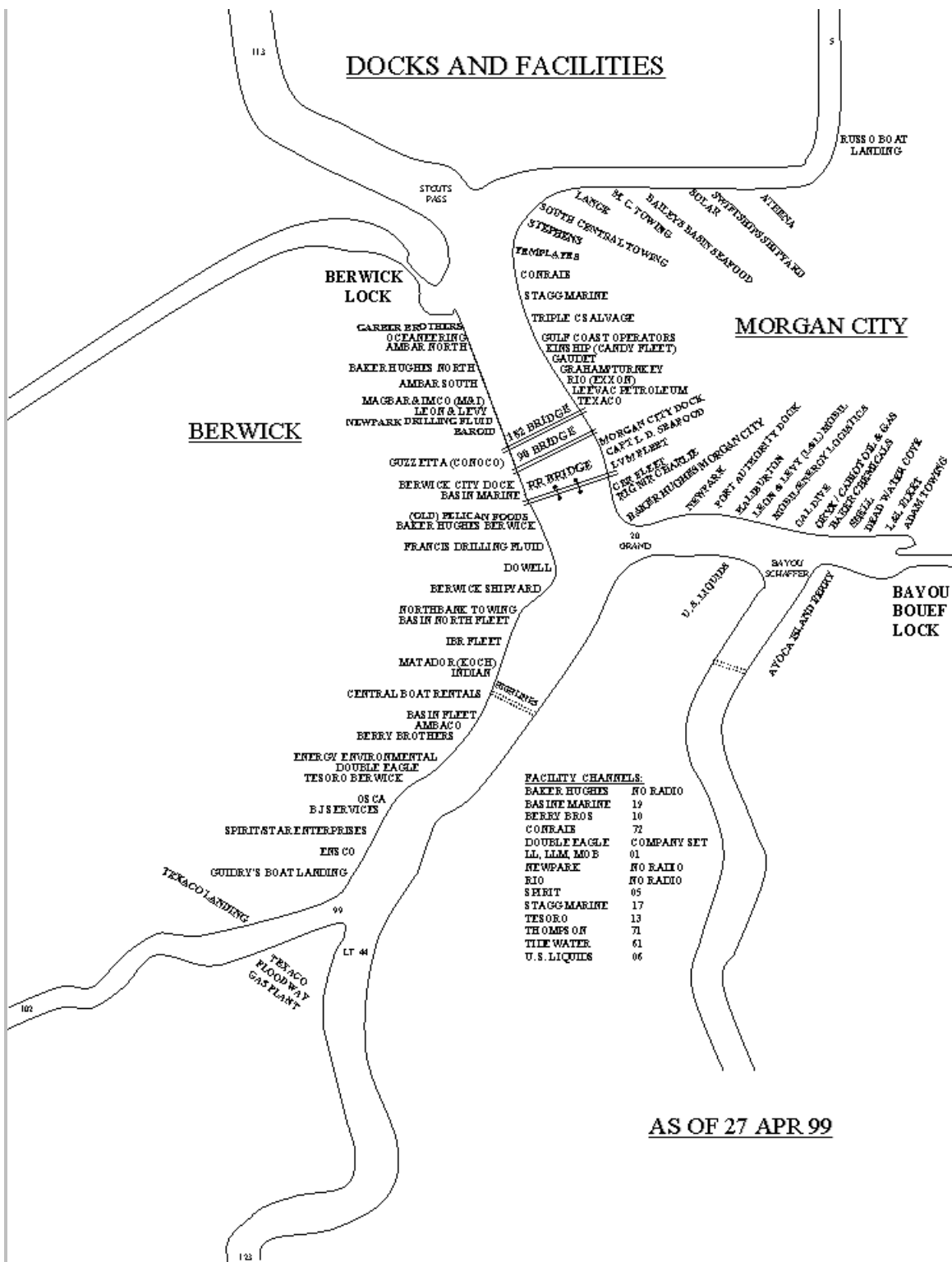


Composite of customary sailing track for
Berwick Bay bridge passage.

- ♦ Entering Berwick Bay from the Port Allen route hold the sailing line shown and reduce speed to about half ahead.
- ♦ Entering Berwick Bay from the Stouts Pass cross the river between ⑤ and ⑥ and favor left descending shore.
- ♦ Generally hold slow speed between ④ and ③ with intermittent use of power to stay on course and close to shore.
- ♦ At ③ current will set tow toward right descending shore if too far in river.
- ♦ Cut point at Conrad Shipyard ③ in close to prevent current from catching stern of tow and rotating it out toward mid-river.
- ♦ Run between slow and half speed at ③ to maintain steerage and control.
- ♦ Should be shaped up by ②. Current tends to get tow out-of-shape between ② and ③.
- ♦ At ① either drive or hold half speed depending on conditions.
- ♦ Enter highway bridge at mid span or just to the right of mid span depending on current conditions.
- ♦ Current will shift at highway bridge and operator must expect a strong left hand draft between bridges.
- ♦ Favor right descending pier of railroad bridge to offset current if making sharp right hand bend in river just below bridge.
- ♦ Under some conditions with a long tow you must back and flank as soon as you clear the railroad bridge in order to line up for passage down river.

1

National Transportation Safety Board, Marine Accident Report, Collision of M/V Stud with the Southern Pacific Railroad Bridge Over The Atchafalaya River, Berwick Bay, Louisiana, April 1, 1978 [Report Number NTSB-MAR-80-5]



Local Phone Numbers and Frequencies

Unit	Channel(s)	Telephone
VTS Berwick Bay	11 VHF-FM	(985) 380-5370
MSO Morgan City	22A VHF-FM	(985) 380-5320
Berwick Lock	12 VHF-FM	(985) 384-7697
Bayou Boeuf Lock	14 VHF-FM	(985) 384-7202
Bayou Boeuf RR Bridge	13 VHF-FM	(985) 631-2476
Marine Operator	24 & 26 VHF-FM	
USCG Group New Orleans	16 VHF-FM	(504) 942-3006

CARGOES OF PARTICULAR HAZARD

Division 1.1 or 1.2 (explosive) materials, as defined in 49 CFR 173.50.

Oxidizing materials or blasting agents for which a permit is required under 49 CFR 176.415.

Highway route controlled quantity radioactive material as defined in 49 CFR 173.403(e) or Fissile Class III shipments of fissile radioactive material as defined in 49 CFR 173.455(a)(3).

Cargoes of particular hazard also include any of the following when carried in bulk (listed by primary name and "also known as" names):

ACETONE CYANOHYDRIN

ACETALDEHYDE

acetic aldehyde

ethanal

ethyl aldehyde

ACROLEIN

ACRYLONITRILE

ALLYL CHLORIDE

ANHYDROUS AMMONIA

liquid ammonia

BUTADIENE

Divinyl

Vinylethylene

1, 3-butadiene

biethylene

bivinyll

BUTANE

n-butylene

BUTENE

butylene

BUTYLENE OXIDE

CARBON DISULFIDE

CHLORINE

CHLOROSULFONIC ACID

DIMETHYLAMINE

EPICHLOROHYDRIN

ETHANE

methylmethane

ETHYLENE

ethene

olefiant gas

ETHYLENE OXIDE

oxirane

1, 2-epoxyethane

ETHYLENIMINE

ETHYL ETHER

HYDROFLUORIC ACID, AQUEOUS

HYDROGEN CHLORIDE, ANHYDROUS

HYDROGEN FLUORIDE, ANHYDROUS

METHANE

METHYL ACETYLENE, PROPADIENE MIXTURE

allene-methylacetylene mixture;

MAPP gas;

methylacetylene-allene mixture;

propadiene-methylacetylene mixture

METHYL BROMIDE

bromethane

embafume

mbc fumigant

monobromomethane

METHYL CHLORIDE

chloromethane

artic

MOTOR FUEL ANTIKNOCK COMPOUNDS
CONTAINING LEAD ALKYLs

OLEUM

PHOSPHOROUS, ELEMENTAL

PROPANE

dimethylmethane

PROPYLENE

propene

methylethylene

PROPYLENE OXIDE

SULFUR DIOXIDE

TOLUENE DIISOCYANATE

VINYL CHLORIDE

chlorethylene

vinyl c monomer

VINYL ETHYL ETHER